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STAFF REPORT
REGULAR CALENDAR

APPLICATION FILE NO.: **1-97-76**

APPLICANTS: **California Department of Fish and Game and Del Norte County**

PROJECT DESCRIPTION: Periodic breaching of the Lake Earl/Lake Talawa sandbar for flood control purposes during the 1998-99 and 1999-2000 rainy seasons (September 16 to February 15) whenever lake elevations reach 8 feet above mean sea level, and February 15 if lake elevations are 5 feet or more above mean sea level.

PROJECT LOCATION: On the beach at the Lake Earl/Lake Talawa sandbar, two miles north of Crescent City, Del Norte County. APN 106-010-05

Plan designation: RCA-1 (General Resource Conservation Area)
Zoning: same as above

LOCAL APPROVALS: No local approvals necessary.

OTHER APPROVALS: State Lands Commission lease and U.S. Army Corps of Engineers permit.

SUBSTANTIVE FILE DOCUMENTS: See Appendix A

STAFF NOTE

Jurisdiction and Standard of Review

The breaching site at the sandbar between Lake Talawa and the Pacific Ocean, along with all of the land and water area of Lake Earl and Talawa approximately up to the fourteen-foot contour, are located within the Coastal Commission's area of original or retained permit jurisdiction. The standard of review is the applicable Chapter 3 policies of the Coastal Act.

Summary of Staff Recommendation

The California Department of Fish and Game (CDFG) and Del Norte County propose to periodically breach the sandbar separating the coastal lagoon system known as Lake Earl and Lake Talawa from the Pacific Ocean for flood control purposes. The U.S. Army Corps of Engineers is currently conducting a study of the lagoon system's biological resources and hydrology. The CDFG and Del Norte County would implement the proposed breaching plan for a two-year period while the study is completed. The applicants intend to apply for a long-term breaching permit and develop a habitat management plan once the study results are available.

A significant flooding hazard to maintained infrastructure is created when the water level in the lagoon reaches approximately 10 feet mean sea level (MSL). The lagoon has been artificially breached, primarily to increase available pasture for grazing livestock over the last 75-100 years. Since 1987, the sandbar has been breached when the water level in the lagoon has reached 8 feet or greater under a series of emergency coastal development permits.

Staff recommends approval of the project with six special conditions. Special Condition No. 1 limits breaching of the sandbar to the middle of the open sandy area of the sandbar, midway between the existing vegetation on either side of the breaching site. This condition will protect sensitive coastal dune communities adjacent to the breaching site by restricting the breaching to the open sand area. Special Condition No. 2 limits the breaching activity to the rainy seasons of 1998-1999 and 1999-2000 only, with the permit to expire on February 16, 2000. To obtain long term breaching authorization, CDFG will be required to apply for a separate coastal development permit. Special Condition No. 3 is a special condition regarding assumption of risk, waiver of liability, and an indemnification agreement. Special Condition No. 4 requires the applicants to restrict public access to the breaching site only during specified times around the breaching. This condition will ensure public safety during breaching and public access at all other times. Special Condition 5 requires the applicants to restrict breaching to periods when brown pelicans are absent from within 200 feet of the breach site and to implement hazing measures throughout the breaching event to protect pelicans and other bird species from harm. Special Condition 6 requires the applicants to search for endangered Tidewater Gobies that are stranded in small pools and return stranded gobies to the main body of the lagoon following breaching.

The proposed development, as conditioned, will prevent flooding of maintained infrastructure while supporting the natural integrity of the coastal estuarine lagoon. The breach will maintain water quality and habitat productivity, and protect natural resources and species of special

concern. The staff believes that the proposed project, as conditioned, is consistent with Coastal Act policies and therefore recommends **approval** of the project.

1.0 MOTION, STAFF RECOMMENDATION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit Application No. 1-97-76, subject to the conditions specified in the staff recommendation dated November 20, 1998.

STAFF RECOMMENDATION OF APPROVAL

Staff recommends a YES vote and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present. Approval of the motion will result in the adoption of the following resolution and findings.

Resolution to Approve Permit:

The Commission hereby **grants** a permit, subject to the conditions specified below, for the proposed development on the grounds that, as conditioned, the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, is located between the first public road and the sea and is consistent with the public access and recreation policies of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

2.0 STANDARD CONDITIONS: See Appendix B.

3.0 SPECIAL CONDITIONS

1. Location of the Breaching Site

The sandbar shall be breached in the middle of the open sandy area and midway between the existing vegetated areas on either side of the breaching site.

2. Duration of the Approved Development

Consistent with the interim two year authorization proposed by the applicants, this authorization is for breaching activity between September 16 and February 15 of the years 1998-2000 only, and terminates on February 16, 2000. The applicants must apply for a new Coastal Development Permit for any proposed breaching activity on or beyond that date.

3. Assumption of Risk, Waiver of Liability and Indemnification Agreement

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, each applicant shall submit a signed agreement in a form and content acceptable to the Executive Director, which shall provide that: (a) each applicant acknowledges and agrees that the site may be subject to hazards including flooding, wave action, and erosion and hereby assumes the risk from such hazards; (b) each applicant unconditionally waives any future claims of liability against the California Coastal Commission, its successors in interest, advisors, officers, agents, and employees for any damage from such hazards or arising out of any work performed in connection with the permitted project; (c) each applicant agrees to indemnify and hold harmless the California Coastal Commission, its successors in interest, advisors, officers, agents and employees against any and all claims, demands, damages, costs, and expenses of liability (including without limitation attorneys' fees and costs of suit) arising out of the design, construction, operation, maintenance, existence or failure of the permitted project, including without limitation any and all claims made by any individual or entity or arising out of any work performed in connection with the permitted project; and (d) each applicant agrees that any adverse impacts to property caused by the permitted project shall be fully the responsibility of the applicant.

4. Restricting Access to Breach Site.

The permittees shall restrict public access to all areas within 500 feet of the breaching location for 12 hours prior to breaching, during the 24 hours of breaching operation, and for 24 hours afterwards. The applicants shall not close any beach area significantly greater than the area within 500 feet of the breach site nor close the breach site for any period of time in excess of 24 hours after breaching. Any temporary signs and/or barriers used to close off the breach site must be removed within 36 hours of the breaching.

5. Brown Pelican and Other Waterfowl Protection

Breaching shall not be conducted when Brown Pelicans (*Pelicanus occidentalis californicus)* are within a 200-foot radius of the breach site. Immediately prior to breaching, a qualified wildlife biologist shall ensure that no pelicans are at risk from the breaching. The permittees shall use noise or visual methods (e.g. zod guns) to haze all on-water birds near the breach site. Hazing shall begin immediately before and continue throughout the breaching event including evening hours.

6. Tidewater Goby Protection

The permittees shall survey for stranded tidewater gobies (*Eucyclogobius newberryi)* between 3 to 14 days following each breaching event. The permittees shall test seining options to assess the effectiveness of possible methods and shall return stranded gobies to the main basin of the lagoon.

4.0 FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

4.1 PROJECT DESCRIPTION

4.1.1 Location and Site Description

The project site is located at the outlet channel of the Lake Earl sandbar, on State lands leased to the California Department of Fish and Game (CDFG), approximately 2 miles north of Crescent

City, in Del Norte County (Exhibit No. 1). Lake Earl, also known as Lake Earl and Talawa, actually consist of two sections of a single extensive estuarine lagoon (Exhibit No. 2), covering approximately 4800 acres.

Coastal lagoons are estuarine waters intermittently separated from the ocean by sand spits or barriers. They form at the mouths of rivers and streams where the velocity of the freshwater flow to the ocean is too low to overcome the accumulation of sand from nearshore currents. The sand deposited by currents form a sand spit or barrier across the mouth of the stream, separating the stream from the ocean. Water accumulates behind the barrier to form a lagoon. Water continues to collect increasing the size of the lagoon until it overtops or liquefies the sand spit and erodes an opening by which the trapped water escapes to the ocean. As the lagoon flows into the ocean, its size and depth diminish until reaching equilibrium with the average tides. During the period that a lagoon is open to the ocean, saltwater flows in and out with the tides creating a saltwater or brackish condition in the lagoon. Eventually, the nearshore currents deposit sufficient sand to re-form the barrier and close the lagoon, beginning the process anew. The period of this cycle is irregular because of the many variables involved (e.g., rainfall, tides, currents, wind, etc.). The processes that create the Lake Earl lagoon have developed over thousands of years and the species inhabiting the lagoon have evolved over the millennia to adapt to this estuarine ecosystem.

The Fish and Wildlife Service characterized Lake Earl and Lake Talawa as “one of the most unique and valuable wetland complexes in California.” The lagoon system supports numerous habitat types including emergent wetlands, open water, mudflats, flooded pastures, woodland, sand beach, and riverine habitat. Lake Earl is an important resting and wintering area of the Pacific Flyway and is visited or home to over 250 species of birds. In addition, over 14 federally threatened, endangered, or candidate species of plants and animals are known to occur at Lake Earl.

Because of the extremely high fish and wildlife values of the lakes and adjacent wetlands, the California Department of Fish and Game (CDFG) identified Lake Earl as one of the 19 coastal wetlands in a 1970's report entitled, "Acquisition Priorities for Coastal Wetlands of California." To better manage the wildlife and fisheries resources in and around the lakes, CDFG has acquired more than 2,500+ acres of land within or adjacent to Lake Earl and Lake Talawa. An additional 2,600+ acres of land has been leased from the State Lands Commission, placing a total of over 5,090 acres of land and water area under management by CDFG. Only approximately 45 acres of land below the 10-foot contour remains in private hands. Since 1991, CDFG has continued to purchase property from willing sellers who own land around the lagoon that is below 10 feet MSL.

Development adjacent to Lake Earl is minimal. Most land is either owned by the California Department of Parks and Recreation, run by CDFG or is dedicated to agriculture and grazing pasture. Adjacent development is limited to three small areas of residential housing (Exhibit No. 3) and one area of industrial development. All of the residential housing is above the 10-foot elevation contour.

Pacific Shores

The Pacific Shores Subdivision is located north of Lake Talawa, south of Kellogg Road, between Lake Earl and the Pacific Ocean (Exhibits Nos. 3 & 4). The Subdivision has 1524 lots on 1486

acres. Approximately 27 miles of paved roads were constructed shortly after the subdivision was approved in 1963. However, except for the road system, the subdivision remains essentially undeveloped. Since 1963, only minimal infrastructure has been installed at Pacific Shores, and no permanent residences have been constructed. Only the main access road has been maintained.

Wildlife Reserves

The California Department of Fish and Game maintains 5,090 acres of land adjacent and within Lake Earl know as the Lake Earl Wildlife Area (LEWA). The California Department of Parks and Recreation manages another 5000 acres of land adjacent to Lake Earl known as the Lake Earl Project. Together they comprise most of the land below the 10-foot lake level and provide both protection for the natural resources and passive recreational opportunities.

Breaching Site

Access to the sandbar (breaching site) is via a road through the Pacific Shores subdivision. The area surrounding the breaching site consists of a broad sandy beach backed by extensive dunes. The dune system is well vegetated and relatively stable, although the dunes within the Pacific Shores subdivision are significantly disturbed due to off-road vehicle use. The breaching site itself remains unvegetated.

4.1.2 History of Breaching Activities at Lake Earl

During the last 75-100 years, people inhabiting the region have artificially breached the sandbar forming the lagoon to create additional summer grazing lands next to the lagoon for area farmers. If allowed to breach naturally, the lagoon would reach a size greater than 4800 acres at about 12-13 feet above mean sea level (12 feet MSL). Artificially breaching the sandbar when the lagoon is at a lower level prevents areas that would under natural conditions be a part of the lagoon from being inundated, significantly reducing the size of the estuary.

With the surface water elevation at 4 feet MSL, the sandbar is several hundred feet wide and as much as 12 to 13 feet high. As the lagoon level increases toward the natural breach height of approximately 12 feet MSL, the quantity of sand needed to be moved to breech the lagoon decreases. Prior to the use of earth moving machinery, the sandbar was breached using horse drawn equipment and hand tools. Certain members of the region's indigenous people (the Tolowa Nation) claim that their ancestors managed the lagoon at 4 feet prior to European settlement using hand tools.

Records of breaching elevations have not been regularly maintained. Although it would have been feasible for early settlers to breech the lagoon without the use of modern heavy equipment, available historical records document that the lagoon level was not consistently maintained at the 4-foot level. Even more recently, between 1950 and 1970, historical records show that the lagoon level rose to over eight feet in five different years. However, U.S. Army Corps of Engineers (Corps) records document that the lagoon rose above 7 feet in 1955 and 1970, and County Flood Control records show breaches at 8.9 feet in 1979 and 6.1 feet in 1983. Since 1986, the lagoon has been breached at or above 8 feet. Although the lagoon has been artificially breached for at least 75-100 years, the best available evidence documents that Lake Earl has not been consistently managed at 4 feet throughout that period.

4.1.3 Previous Commission Actions

Between 1976 through 1986, the County breached the lagoon under a Corps permit whenever the water level exceeded 4 feet. The Coastal Commission became involved in 1987 when it received a notice from the Corps that the County had applied for a new five-year Corps permit to continue to breach the sandbar. In response to that notice, the Commission informed the County that the breaching activity required a coastal development permit from the Commission because the activity constitutes development under the Coastal Act and because the breaching site is located within the Commission's original permit jurisdiction.

Beginning in 1987, and continuing to 1998, the Executive Director has approved a series of emergency permits to breach the sandbar for flood control purposes whenever the elevation of the lagoon is 8 feet MSL or higher. In December of 1991, the Coastal Commission granted Permit No. 1-91-63 to allow periodic breaching of the sandbar at Lake Earl and Talawa by Del Norte County for flood control purposes. In approving Permit No. 1-91-63, the Commission added a special condition to the permit which required the applicant (the Del Norte County Public Works Department) to "breach the sandbar whenever the lake elevation reaches 4 feet above mean sea level." The Commission found that, in the absence of specific hydrological and biological studies to fully assess the project's impacts upon the surrounding agricultural and other lands that would be subject to flooding if the sandbar were regularly breached at 8 feet MSL, it would be better to maintain the 1976-1986 status quo by requiring breaching at 4 feet MSL until such time that the required studies were completed and all of the outstanding environmental issues had been formally analyzed.

The sandbar is owned by the State of California and leased by the California Department of Fish and Game. Breaching the sandbar whenever the lake elevation is at 4 feet MSL was not acceptable to the California Department of Fish and Game because of concerns about how resulting reduced lake levels would adversely affect wildlife habitat. Therefore, the Department withdrew its permission to allow the County to enter the land to breach the sandbar at 4 feet MSL. In a November 20, 1991 letter to the Coastal Commission from Banky E. Curtis, Region 1 Manager of the CDFG, Mr. Curtis stated:

> *"It should be understood that the Department of Fish and Game agreed to the specific plan contained in Application No. 1-91-63. We would oppose any changes in the plan which would reduce lake levels below those proposed by Del Norte County in Application No. 1-91-63. Is should also be understood that our permission to allow Del Norte County to enter our property to breach the sandbar is predicated on the conditions included in the original permit application. This permission would be withdrawn if changes were made which we determined would adversely affect fish and wildlife resources."*

If a permittee accepts the benefits of a coastal development permit and commences a project that has been approved by the Coastal Commission, then the permittee is required to adhere to all of the terms and conditions of permit approval. However, an applicant is under no legal obligation to actually perform or undertake a project that has been granted a coastal development permit by the Coastal Commission. If the conditions of permit approval are not acceptable, either the owner of the land or the applicant can simply choose not to exercise the permit. In this case, the Department of Fish and Game chose not to allow the county applicant to exercise Permit No. 1-91-63 on lands subject to their authority.

The Commission has never received a permit request from any party to breach the sandbar for flood control purposes whenever the lagoon is at 4 feet MSL. In fact, since 1987 until now, the Executive Director has received and approved a series of emergency permits from the Del Norte County Department of Public Works to regularly breach the sandbar for flood control purposes whenever the water elevation of the lagoon is at 8 feet MSL or higher. The California Department of Fish and Game has not opposed these emergency permits, and in fact, is often a co-applicant.

Except for the two-year authorization period requested, the project that was approved for Del Norte County under Permit No. 1-91-63 had the same project description that is now being proposed by Del Norte County and the California Department of Fish & Game under this permit (Application No. 1-97-76). In September 1996, the Commission also opened a public hearing for Permit Application No. 1-94-49 for the same breaching proposal as that described in this permit application. Prior to that hearing, James Wakefield, counsel for the Pacific Shores Subdivision Water District, submitted a letter raising a number of issues concerning the Pacific Shores property owners. The Commission opened the hearing in September 1996, but continued the matter to allow the applicants time to respond to the questions raised in Mr. Wakefield's letter. The applicants subsequently withdrew their application and later resubmitted it as the application currently before the Commission.

Since 1991, when the Commission acted on CDP 1-91-63, CDFG has continued to purchase property from willing sellers who own land around the lagoon that is below 10 feet MSL. At the 1991 public hearing under Permit No. 1-91-63, the Commission heard testimony from the Brian Ferguson, a local dairy farmer, whose land was being flooded. The Department has since purchased 112 acres of land below the ten-foot contour from the Ferguson family. The Department estimates that about 42 acres of privately held land below the ten-foot contour is still subject to periodic flooding. This 42-acre area is spread among portions of six private ownership's, does not include any permanent inhabitable structures and does not include land within the Pacific Shores subdivision. Although the Pacific Shores subdivision is an area where CDFG has incomplete information as to flooding impacts, Pacific Shores is not developed with residential housing.

Since the 1996 Commission meeting, the Lake Earl Working Group has worked on completing the environmental impact assessment of the proposed breaching of Lake Earl at 8feet. The California Department of Fish and Game, the U.S. Fish and Wildlife service, and the Army Corps of Engineers have responded to the 48-questions presented by Wakefield. These agencies have provided wildlife life history and hydro-geologic information which demonstrates the appropriateness of the proposed project (CDFG 1996, Stover 1996, Pierce 1997, Del Norte 1998). These reports and letters have provided Commission staff with the additional information needed to make the below findings regarding impacts to sensitive resources.

In addition, Joseph Milton, Staff Counsel of the Department of Fish and Game, in a letter dated October 8, 1998 (Exhibit No. 5), responded to claims of property takings made within the August 19, 1996 Pacific Shores Subdivision Water District letter. The CDFG responded to the District's allegations stating that:

> "*the District offers no credible explanation of how the Breaching, or any of the Department's 'past or present actions' induced a constitutional taking of private property, nor does it*

explain how those who buy property in an officially designated wetlands area sustain a compensable injury if their land becomes wet."

4.1.4 Breaching Proposal

The applicants propose to periodically breach the sandbar between September 16 and February 15 when the lake elevation is 8 feet above MSL, and again on February 15 if the lake elevation is 5 feet or more above MSL during the 1998/1999 and 1999/2000 winter rainy seasons.

The breaching activity involves pushing sand to either side on the sandbar with a caterpillar tractor to form a channel. Once the sandbar is breached, the draining water quickly deepens and widens the outlet channel. Within a day or two, the level of the lake is quickly lowered to about mean sea level, depending on the tides and winter storms. The breaching allows salt water from the ocean to mix with the fresh waters of the lagoon for a period of about two to six weeks until the outlet channel is naturally closed again by sediments deposited by long shore currents. Once the outlet channel is closed, the lake elevation rises again. The rate of lake-elevation rise is a function of the rate of recharge by surrounding ground water, surface water runoff, and precipitation.

The County indicates that breaching at 8 feet MSL allows for some margin of safety (i.e. some additional storage capacity of the lagoon) before serious flooding of County roads occurs. In addition, the CDFG strongly believes that breaching the sandbar under the proposed project description (at 8 feet MSL) minimizes risks to life and property more effectively than breaching the sandbar under a continuing series of emergency permits. This is because lake elevations can rise quite rapidly after a request for an emergency permit is made, particularly if the request is made during a winter storm. It can be extremely dangerous to attempt to breach a sandbar during a winter storm. By the time that the storm subsides, the water level in the lagoon may exceed 10 feet MSL. The difference in the surface area of the lagoon between 8 feet MSL and 10 feet MSL is approximately 692 acres and is equivalent to 5 inches of rain within the watershed. County roads begin to flood when the elevation of the lagoon is between 8 and 9 feet MSL. See Exhibit No. 6. Private wells are overtopped at 10 feet MSL, and an unknown number of low lying septic systems begin to malfunction at 10 feet MSL

Breaching on February 15, when the lake elevation is at least 5 feet or more above MSL, is a pre-emptive measure to avoid having to breach the lagoon during the spring and summer months in the event of a wet spring. Both the County and the CDFG prefer to avoid having to breach the lagoon during the spring and summer months as breaching during this time of the year is more environmentally disruptive. Long shore currents may not be strong enough during the spring and summer to close the sandbar and allow the lake level to rise. If the sandbar is not closed, the lagoon remain very shallow, small, and open to the ocean. Shallow summer waters may have higher temperature and salinity levels which can impact many of the sensitive resources living within Lake Earl including juvenile salmonids, tidewater gobies, and the sego pond weed, a dominant waterfowl food plant. A smaller lake size also reduces the size of the aquatic habitat and fishing opportunities for the public.

The County estimates that even with an unusually wet spring that there is a zero probability that the lagoon will need to be breached for flood control purposes during the spring and summer

months if it is allowed to breach the sandbar on February 15 if the lake elevation is 5 feet or more above MSL.

4.3 Consistency with the Coastal Act

4.3.1 Biological Resources/Environmentally Sensitive Habitat

Coastal Act section 30107.5 states:

> *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

Coastal Act section 30230 states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Coastal Act section 30231 states in part:

> *The biological productivity and the quality of coastal waters... appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored....*

Coastal Act section 30233 in part states:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> *(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study…*

Coastal Act section 30240(a) states:

> *Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*

4.3.1.1 Lake Earl Wildlife Area.

The California Department of Fish and Game is a major manager of State-owned property in the Lake Earl and Lake Talawa area, known as the Lake Earl Wildlife Area. The State of California has a fee interest at the breaching site and in the lakes and surrounding lands. See Exhibit No. 7. Lake Earl supports significant fish and wildlife resources, including several threatened or endangered species. Because of the extremely high fish and wildlife values of the lakes and adjacent wetlands, the Department identified Lake Earl as one of the 19 coastal wetlands in a 1970's report entitled, "Acquisition Priorities for Coastal Wetlands of California." The habitat values of the Lake Earl ecosystem are vulnerable to disturbance by human activities such as filling or draining. Because of its significant habitat values and its sensitivity to disturbance, the Lake Earl ecosystem qualifies as an environmentally sensitive habitat area (ESHA) as defined under Coastal Act section 30107.5.

The decision to acquire certain lands to protect and to enhance the natural resources of Lakes Earl and Talawa was approved by the Wildlife Conservation Board in 1979 and in coordination with the California Department of Parks and Recreation and the State Lands Commission. To better manage the wildlife and fisheries resources in and around the lakes, the Department has continued to expand its ownership in the area via an ongoing acquisition program to purchase from willing sellers all private lands around the lakes up to the 10-foot contour. The Department has acquired more than 2,500+ acres of land within or adjacent to Lake Earl and Lake Talawa. Only a relatively small amount of land below the 10 foot contour remains in private hands. An additional 2,600+ acres of land has been leased from the State Lands Commission, placing a total of over 5,090 acres of land and water area under management by the California Department of Fish and Game. In November of 1994, the State Lands Commission amended its lease agreement (No. PRC 5879.9) with the California Department of Fish & Game to expand the lease area and conduct the interim annual breaching that is requested herein. See Exhibit No 7, pages 4 through 9.

In 1987, the California Department of Water Resources began what was originally planned as a two-year water level management study of Lake Earl and Lake Talawa in cooperation with the California Department of Fish and Game. The objective of the study was to determine the most beneficial water level for the lakes throughout the year for fish and wildlife use, considering the factors of surrounding septic tank problems and the flooding of adjacent land. As proposed, the first year of the study was intended to monitor the lake and nearby groundwater levels. Water quality and lake water level control alternatives were also to be evaluated. The second year of the study was intended to address possible solutions to any water quality problems discovered during the first year and to formulate a recommended management plan for the lakes in concert with the California Department of Fish and Game and Del Norte County.

Unfortunately, the completion of the study was delayed due to State funding problems. However, preliminary information from the study is available. For example, the Department estimates that the lakes would have the following surface areas at different elevations: 4,826 acres at 10 feet MSL; 4,134 acres at 8 feet MSL; 3,573 acres at 6 feet MSL; 2,828 acres at 4 feet MSL; and 2,191 acres at 2 feet MSL. The size of the lakes when they are at 0 feet MSL is not yet available. The Department estimates that the difference in the size between the lakes at 4 feet MSL 4 and 8 feet MSL is 1,306 acres, or a 46 percent increase in the size of the lakes.

4.3.1.2 Army Corps of Engineers Wildlife Monitoring Plan

The proposed breaching plan is intended to improve the natural habitat of the Lake Earl estuarine system. The best information available about the natural history of Lake Earl and its species of special concern supports the assessment that the proposed breaching plan will best protect the natural resources, while providing the necessary flood control (Pierce 1997, Shaw and Wiseman 1992, Hammond 1992, CDFG 1996, Del Norte 1998, Monfroe 1995, Stover 1996, USFWS 1995). There are gaps, however, in the information necessary to gauge the anticipated improvements. Before long term changes (positive or negative) can be assessed, initial information must be acquired.

The Army Corps of Engineers has provided approximately $323,000 to conduct an assessment of the habitat associated with Lake Earl. The study is directed at determining the state of the system at the initial stages of the new breaching plan. The information gathered will be invaluable in determining if habitat and species changes are occurring through time. Present habitat types will be characterized and mapped and compared with historical photos to document changes that have occurred in the past. Bird surveys will document the number of species and size of the populations that visit the lake throughout the year. Water quality parameters important to anadromous fish will be measured throughout the year. Tidewater goby and Oregon silver spot butterfly surveys will be conducted to identify any significant impacts to these species.

4.3.1.3 Tree deaths

There have been suggestions that between 991 and 1497 trees adjacent to Lake Earl were killed by water levels which rose above 4 feet. The CDFG, however, indicates that this allegation is unsubstantiated (Exhibit No. 8). The most common trees along the Lake Earl shore are red alders, willows, and Sitka spruce. These species are commonly found adjacent to and within wetland habitats such as Lake Earl and are often in areas where standing water is present for many months. CDFG staff indicate that the more likely cause of the tree deaths is from increased water salinity. The unusually dry spring of 1992 caused the breach to remain open for several months, increasing salinity of the lake to between 8.5 and 18 ppt. These species are susceptible to increased salinity. The proposed breaching strategy is designed to limit the salinity of the lake during most years and should support new growth of these species. Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned above shall protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

4.3.1.4 Threatened & Endangered Species

Anadromous Fishes/Coho Salmon

Federally Listed as Threatened

The threatened Coho Salmon enters Lake Earl between October and February once the lake has been breached, and spawn in gravel deposits within the adjacent creek tributaries. The juvenile fish rear in the cool streams for up to 15 months and then migrate to Lake Earl and the ocean. Breaching after February 15 could lower summer water levels because spring rains often are

insufficient to refill the lake. Lower summer lake and stream levels would lead to increased temperature, and decreased oxygen concentrations, which are not favorable to juvenile salmonid survivorship. The proposed breaching schedule would limit the need for late (after February 15) breaching events. This will lead to a more stable spring and summer water level, helping to maintain the habitat and water quality necessary to support juvenile fish survivorship (Pierce 1997).

The breaching schedule would also allow juvenile salmonids to migrate to the ocean and adult fish to return to spawn. Breaching events would be determined by water level rather than calendar date and would closely mimic the true variability of the natural breaching cycle. Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned above will improve water quality and food abundance of Lake Earl to benefit the Coho Salmon population and protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

Tidewater Goby

Federally Listed as Endangered

The endangered tidewater goby has been found in Lake Earl in varying numbers throughout the years. The effects of breaching on the goby population are unknown. However this species has adapted to these dynamic coastal estuarine systems and should benefit from a more natural breaching schedule. Improved summer water quality will also benefit the goby. Low summer water levels associated with the previous breaching schedule increased salinity fluctuations and increased anoxic conditions, which decrease food sources and potentially impacted the goby population. The Corps sponsored monitoring program will further characterize the health of the population to identify the benefits and possible impact of the proposed breaching regime on the Lake Earl goby population.

Breaching of the lagoon causes gobies to be stranded within isolated pools that remain around the margins of the lagoon after water levels have receded. To minimize the loss of gobies from stranding, the Commission attaches Special Condition No. 6 which requires the permittee to survey stranded tidewater gobies and shall return stranded gobies to the main basin of the lagoon.

Initial seining efforts conducted by California Department of Fish and Game after the November 1998 breaching found that there are large numbers of gobies stranded within the isolated pools of the lagoon after breaching. In addition, this initial seining attempt identified the difficulties of manually seining the numerous pools.

Coastal Act section 30240(a) requires that environmentally sensitive habitat areas shall be protected against significant disruption of habitat values. Coastal Act section 30231 requires that the biological productivity and quality of coastal wetlands be maintained to support optimum populations of marine organisms. As discussed above, breaching of the lagoon causes the stranding and death of tidewater gobies. However, under natural conditions the lagoon would breach regularly. Since natural breaching occurs at a higher water elevation than that proposed, it

is likely that even greater strandings would occur during a natural breaching event. Thus, the strandings associated with the proposed project are considered consistent with the natural conditions of the Lake Earl estuarine system.

Preliminary information from the Corps sponsored monitoring program indicates the goby population size within the lake is much greater than previously believed. Population estimates may exceed ten thousand individuals during the height of the season and a larger portion of the lake is being used by the gobies than previously estimated (pers. com. Ray Bosch, USFWS). A population of this size would be the largest known population in the region. This information indicates that the losses due to stranding will not significantly impact the viability of the population and the proposed breaching schedule will sustain the environmental parameters required by this species.

Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned above is (1) consistent with the natural conditions of Lake Earl, (2) is not expected to impact the goby population as a whole, and (3) requires monitoring of the population and remediation if necessary to protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

Oregon Silver Spot Butterfly

Federally Listed as Threatened

The Oregon silver spot butterfly is found in and adjacent to the dunes on the northern shore of Lake Earl. This species relies on the western blue violet for food and larval attachment. The western blue violet requires a high water table to survive the summer months. Historical records indicate that the violet population has decreased in abundance, and once grew in many areas it now does not. A lowered water table caused by breaching at 4 feet may be responsible for this decrease. Higher water levels (8 feet) would increase the amount of habitat able to support the growth of the violet and thereby benefit the butterfly (Pierce 1997).

While the breaching schedule is believed not to impact the Oregon silver spot butterfly, it is possible that the butterfly larvae could be flooded in the lower portion of violet habitat. The higher water table associated with the proposed breaching schedule could allow for the expansion of the violet population and potentially increase the available habitat and numbers of the butterfly. Thus, to the degree that butterfly larvae are disturbed in the lower portion of the habitat by the proposed breaching schedule, this impact will be more than off set by the benefits to the species derived from the higher water table. A portion of the Corps supported monitoring program will study the violet and butterfly populations to confirm that there are no impacts to the butterfly or violet population from flooding or loss of habitat. Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned above shall protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

Brown Pelican

Federally Listed as Endangered

While the brown pelican should benefit from the increased health of the Lake Earl habitat, these birds can be harmed during breaching episodes. Although it is unlikely that pelicans will be in the area during breaching (Dec – Feb), birds that are in the area can be caught in the strong and turbulent flows that occur during breaching. It is likely that birds so entrained would be unable to negotiate the rough water in the outflow and surf and would drown. Therefore, to ensure that no brown pelicans are injured during the breaching, **Special Condition 5** requires the applicants to haze any pelicans present prior to breaching (scaring off through noise making and visual methods).

Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned is (1) consistent with the natural conditions of Lake Earl, (2) is not expected to impact Brown Pelicans, and (3) requires hazing of animals or halting of operations while Brown Pelicans are in the immediate area to protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

Water Fowl

Common Species

During a breach in November 1998, which was approved under an emergency Coastal Development Permit # 1-98-098G, approximately one thousand birds including coots and ducks died after being caught in the turbulent flows. Impromptu hazing efforts were ineffective and many of the deaths occurred at night when hazing did not occur. While these birds are common and not federally listed species, such losses are a concern. Therefore, Special Condition 5 was modified to include hazing of other bird species immediately prior to and throughout the breaching event. Automatic hazing methods should be employed after dark to keep birds from harm. Hazing of birds during breaching will limit waterfowl impacts while maintaining the lakes natural habitat value.

Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned is (1) consistent with the natural conditions of Lake Earl, and (2) requires hazing of animals during breaching to protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

The Aleutian Goose

Federally Listed as Threatened

The Aleutian goose requires short grasses as foraging habitat. Higher lake levels may submerge some grazing lands for several months of the year and be unavailable to geese for foraging. The geese not only use the Lake Earl Wildlife Area (LEWA) for grazing but also graze on local farm land. Farmers have voiced concern about the geese on their land. Suggestions that the birds moved to adjacent farmland because of lack of grasslands caused from changes in the breaching schedule have been disputed. Better soils and other favorable grazing conditions occur on

adjacent farmland and attract the geese. The Department of Fish and Game suggests that available foraging area is not a limiting resource to the migrating birds. The U.S. Fish and Wildlife Service has indicated that the breaching will not result in adverse impacts to the geese.

In response to concerns over the use of private land by the geese, the Department of Fish and Game is undertaking active management efforts to enhance the Aleutian goose foraging on the LEWA and began a hazing program on private land to encourage the use of the LEWA. Cattle will be used to graze 300 acres of grass within the LEWA to increase the availability of good short grass foraging area. These activities will provide ample grazing area for the present goose population within the LEWA. Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned above shall protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

Bald Eagle, Peregrine Falcon

Federally Listed as Threatened

There would be no impact from the proposed breaching plan. These birds periodically use the Lake Earl area for hunting. The changes in lake elevation will not disturb their hunting range or nesting areas. Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned above shall protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

Western Snowy Plover

Federally Listed as Threatened

The breaching of Lake Earl requires the use of heavy machinery on the beach at the breach site. Western snowy plovers are documented to nest seasonally in the breaching area and near the beach access ways. These nests can be easily impacted by vehicle or foot traffic. Therefore, to avoid any potential impacts, the applicant has modified the breaching plan by changing the initial breaching date from September 1 to September 16 to better coincide with the end of the western snowy plover nesting season. By changing the proposed dates of the breaching to begin after September 16, there is little likelihood of an impact to the nesting birds. Therefore, the Commission finds the proposed breaching of Lake Earl as outlined and conditioned above shall protect the biological productivity and habitat values of Lake Earl in conformity with Coastal Act sections 30231 and 30240(a).

Western Lily

Federally Listed as Endangered

There is no population of lily in the Lake Earl flood plain.

4.3.1.5 Dredging of Wetlands

The Coastal Act Section 30233 allows the diking, filling, or dredging of open coastal waters and wetland under certain specified conditions. However, the act of breaching the sand bar under the proposed project does not trigger an analysis under Section 30233 for the following reasons. 1)

The proposed breaching does not involve the placement of any pipeline or other constructed devise into a wetland or open coastal water area. 2) The proposed breaching involves the parting of dry sand to form a channel to a depth that is approximately at lake level and does not involve any diking or dredging of any wetland or open coastal waters. 3) The proposed breaching does not involve any filling of any wetlands or open coastal waters since the definition of "fill" per Section 30108.4 of the Coastal Act means in applicable part: "Earth or any other substance or material… placed in a submerged area.

4.3.1.6 ESHA Requirements

Section 30240(a) of the Coastal Act requires that "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. For the reasons discussed above, the Commission finds that the proposed breaching strategy protects the Lake Earl estuarine system from "significant disruption of habitat values" and best mimics the natural breaching processes while eliminating water quality contamination from flooding of adjacent wells and infrastructure above 10 feet MSL.

Conclusion—Biological Impacts

The proposed project effectively protects the important habitat values of the Lake Earl lagoon system while minimizing the risk to life and property from flood hazards. All available information suggests that all pertinent environmentally sensitive habitat areas will not be affected or will benefit from the proposed breaching level. The present permit is for approval of an interim two-year period. The limited two-year authorization will allow regulated breaching while additional environmental studies are completed to further define and validate the long-term breaching strategy and ensure the long-term protection of sensitive species and habitats. Any results from the Corps study that document environmental impacts will be taken into consideration in two years when the applicants must apply for an additional coastal development permit.

The Commission therefore finds that the proposed project as conditioned will; 1) sustain the biological productivity of coastal waters and maintain healthy populations of all species of marine organisms, 2) maintain the biological productivity and the quality of coastal waters, 3) limit any alteration of coastal wetlands identified in " Acquisition priorities for the Coastal Wetlands of California", and 4) protect environmentally sensitive habitat areas against any significant disruption of habitat values, and is therefore consistent with Coastal Act sections 30230, 30231, 30233, and 30240 respectively.

4.3.2 Hazards

Coastal Act section 30253 states in relevant part:

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

4.3.2.1 Flooding

Existing Development

The purpose of the proposed project is to minimize the risk of flooding developed areas surrounding the lagoon. Natural breaching typically does not occur until the lagoon reaches 12 to 13 feet. At this level, public roads, wells, and septic systems are threatened. Breaching the sandbar for flood control purposes at 8 feet has taken place each year since 1987 under emergency permits. This permit application proposes to continue that practice for a two-year period under more defined and reasonably foreseeable circumstances than what exists under an emergency permit. Planned breaching more effectively minimizes the risks of flooding to life and property than an unplanned breaching under an emergency permit.

Development on the east side of the lagoon and around Lower Lake Road and particularly Lower Lake Road and Kellogg Road (both maintained by the County) would flood without the proposed breaching. First, the roadbed is saturated when water reaches 8 to 9 feet. The surface elevation of the public roads begins to flood when the lake reaches 9 feet or more above MSL. Second, as stated by Garry Monroe of CDFG in a letter dated November 13, 1995, the Department's reason for applying for a breaching permit at the 8-foot level is "in preventing the flooding of nine domestic wells that serve existing development (six are abandoned and three are still in use) located above the 10-foot elevation." All habitable residential structures and industrial development are located above the 10-foot elevation.

The applicants propose to periodically breach the sandbar between September 16 and February 15 when the lake elevation is 8 feet above MSL, and again on February 15 if the lake elevation is 5 feet or more above MSL during the 1998/1999 and 1999/2000 winter rainy seasons. Based on the best available hydrological, runoff, and rainfall data available, the County estimates that under the proposed breaching plan spring and summer lake-elevations would be in the following ranges.

- Average rainfall years: Elevation 5.5 to 7.0 feet (6 out of 10 years)
- Extremely wet years: Elevation 7.0 to 9.0 feet (2 out of 10 years)
- Extremely dry years: Elevation 4.0 to 5.5 feet (2 out of 10 years)

The County indicates that breaching at 8 feet MSL allows for some margin of safety (i.e. some additional storage capacity of the lagoon) before serious flooding of County roads occurs. In addition, breaching on February 15, when the lake elevation is at least 5 feet or more above MSL,

is a pre-emptive measure to avoid having to breach the lagoon during the spring and summer months in the event of a wet summer. Both the County and the CDFG prefer to avoid having to breach the lagoon during the spring and summer months as breaching during this time of the year is more environmentally disruptive. Long shore currents may not be strong enough during the spring and summer to close the sandbar and allow the lake level to rise. If the sandbar is not closed, the lagoon remains very shallow, small, and open to the ocean. The shallow waters may allow water temperatures to rise above optimum levels necessary to maintain salmonids. A smaller lagoon size reduces fishing opportunities for the public, and a prolonged exposure to salt waters can adversely affect the existing aquatic vegetation in the lagoon. The County estimates that even with an unusually wet summer there is a zero probability that the lagoon will need to be breached for flood control purposes during the spring and summer months if it is allowed to breach the sandbar on February 15 if the lagoon elevation is 5 feet or more above MSL.

Pacific Shores Subdivision

The Pacific Shores Subdivision is located north of Lake Talawa, south of Kellogg Road, and generally between Lake Earl and the Pacific Ocean (Exhibits No. 3 & 4). The Pacific Shores Subdivision was approved and recorded in 1963, nearly a decade before voter approval of the 1972 Coastal Initiative. The Subdivision has 1524 lots on 1486 acres. Approximately 27 miles of paved roads were constructed shortly after the subdivision was approved. However, except for the road system, the subdivision remains essentially undeveloped. Only the main access road has been maintained. To date, no homes have been proposed or constructed within the subdivision, although two mobile homes have been placed on Pacific Shores lots. None of the water wells impacted by water elevations above 10 feet are located within the Pacific Shores subdivision. In 1971, the California Regional Water Quality Control Board adopted requirements for separation between septic systems and the highest anticipated groundwater. The majority of the land area within the subdivision can be characterized as a coastal dune system. Due to sandy soils and high groundwater conditions, development within Pacific Shores could not comply with these standards.

In 1981, the Coastal Commission approved the Coastal Element of the County's General Land Use Plan, but denied certification of the Pacific Shores Subdivision area. The Pacific Shores Subdivision then became an area of deferred certification. The subdivision is noted on the County's LUP map as a "Special Study Area".

In 1985, the Coastal Commission approved Permit No. 1-85-38 which allowed the creation of the Pacific Shores Subdivision California Water District (District) for purposes of assessing its property owners to have special studies prepared regarding the feasibility and possible environmental impacts of water and septic system construction. In July of 1992, the District submitted an application to Del Norte County for a coastal general land use plan and rezone. The County has recommended that an EIR be prepared and the studies are ongoing.

In a letter to Commission staff from Wakefield dated August 19, 1996, the District states that the subdivision was designed based on the assumption that the lagoon would be maintained at 4 feet or lower, and that:

> *"With breaching deferred until the lakes rise to eight feet MSL, at least 75 privately owned parcels will be underwater or partially underwater for many months of the year." [Emphasis in the original]* (Exhibit No. 9)

According to the Corps flood plain mapping, 218 of the 1524 lots within the subdivision are susceptible to flooding during a 100-year flood event. The County of Del Norte predicts that 2.73 miles of private access roads within the subdivision would be inundated at the 9-foot level.

The District proposes that the lagoon level should be managed at 4 feet in order to protect property values within the subdivision. As stated above, only minimal infrastructure has been installed at Pacific Shores since 1963, and no permanent residences have been constructed. Private roads within Pacific Shores are reported by the County to begin to flood when lake levels exceed 8 feet. The Commission has no evidence of flood damage to either of the mobile homes in the subdivision. Until such time that low lying lots within the subdivision are developed, there does not appear to be any actual threat of harm due to flooding of areas below 8 feet MSL. Further, it is unlikely that development permits could be granted within the subdivision due to septic system problems associated with the shallow water table.

The proposal to breach at 8 feet will substantially reduce the maximum area of the lagoon over its natural level at 12-13 feet. Nevertheless, the applicants' proposal is necessary to prevent flooding of County roads and existing infrastructure. Breaching at the 4-foot level, as suggested by the District to protect undeveloped lots from periodic inundation, would further reduce the area of the lagoon by approximately 40 percent. Therefore, an 8 foot breaching level has been proposed to maintain the greatest area of shallow water lake and wetland habitat and to maintain the summer water quality necessary to support the associated wildlife, while complying with Coastal Act section 30253(1) to "minimize risks to life and property in areas of high geologic, flood and fire hazard".

Hazard Created by Breaching

Breaching the sandbar creates a temporary safety hazard to beach users. When breached, water from the lagoon rapidly escapes to the sea with significant force, endangering anyone who wanders too close. Once the water level in the lagoon reaches equilibrium with sea level, the hazard is abated. Special Condition No. 3 provides for the applicants' assumption of risk, waiver of liability and indemnification of the Commission is generally imposed on applicants proposing projects in areas subject to high risk of flood, wave and erosion hazard. To protect the public from this hazard, **Special Condition 4** requires the applicants to restrict access on the beach near the breach site prior to, during breaching and for a 24-hour period following the end of breaching.

Conclusion – Hazards

The proposed project effectively protects the important habitat values of the Lake Earl lagoon system while minimizing the risk to life and property from flood hazards. The Commission therefore finds that the proposed project, as conditioned to protect beach users during breaching events, is consistent with Coastal Act section 30253.

4.3.3 Archaeological Resources

Coastal Act Section 30244 states:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

The native Tolowa and Erl people lived adjacent to the lake prior to European settlement of the region. Previous archaeological surveys conducted in the Lake Earl area have documented Tolowa sites at numerous locations around the lake above the 10-foot elevation.

The Tolowa Nation, an organization representing approximately 40 Tolowa people, have expressed concerns during the public hearing on CDP application no 1-94-49 in September of 1996 that burial grounds and other Tolowa archaeological sites are flooded at lake levels exceeding 4 feet MSL and therefore advocate management at or below that level *(Bowen, 1993, 1995, 1996, 1997)*. To date, the location of these Tolowa archaeological sites have not been documented. However, the Elk Valley Rancheria Tribal Council, and the Smith River Rancheria, representing together approximately 880 Tolowa people, have expressed their support for the Department's proposal to manage the lake at the 8-foot level, and disagree with the assertion that Tolowa archaeological sites are threatened by flooding at levels greater than 4 feet (*Green, 1997; Richards, 1997*).The Corps' Lake Earl study discussed in section 4.3.1.2 above includes an archaeological survey of the lagoon area. Field work for the archaeological survey has been completed and preliminary results do not show evidence that Tolowa burial sites will be significantly degraded from water levels below the 10-foot contour *(pers. comm. Rosko 10/13/98)*. Additional surveys are scheduled with a representative of the Tolowa Nation to further survey areas below the 10-foot elevation.

Coastal Commission staff has requested Tolowa Nation to provide further information or documentation about archaeological sites that would be flooded by water levels exceeding 4 feet. The people of Tolowa Nation have not yet responded. Without any such documentation, there is no evidence that the proposed project will adversely affect Tolowa archaeological resources. Therefore, the Commission finds the breaching proposal is consistent with Coastal Act Section 30244.

4.3.4 Public Access

Coastal Act section 30211 states:

> *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30212 (a) in part states:

> *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects…*

Coastal Act Section 30211 requires in applicable part, that new development not interfere with the public's right of access to the sea where acquired through use. Coastal Act Section 30212 also requires in applicable part that new development provide public access from the nearest public roadway to the shoreline except where adequate access exists nearby, or where the provision of public access would be inconsistent with public safety. In applying Section 30212,

the Commission is limited by the need to show that any denial of a permit application based on these policies, or any decision to grant a permit subject to special conditions requiring public access, is necessary to offset a project's adverse impact on existing or potential public access.

The breaching site is located between the first public road and the sea. Therefore, the Commission must consider whether requiring public access is appropriate in this case.

The proposed breaching activity does not require the provision of any new public access under Section 30212(a)(2) as adequate public access exists nearby, to and along adjacent beaches, and to the lake waters. The project will cause some interference with public access along the beach when the lake waters are periodically released into the Pacific Ocean. The breaching creates a hazard for those who venture too near the breach site as the water from the lakes rapidly discharges through the breach with terrific force. Consequently, the Commission attaches Special Condition No. 4, which requires the applicants to restrict public access to all areas within 500 feet of the breaching location 12 hours prior to breaching, during the 24 hour breaching operation, and for 24 hours afterwards.

As conditioned, temporary (60-hrs) interference of public access from the breaching will pose no significant or lasting adverse impacts on public access or recreational beach use. Furthermore, breaching the sand bar when the lake elevation is at 8 feet MSL rather than at higher lake elevations, will result in a shorter period of time that boat launching ramps and other public access facilities scattered around the lakes are unusable due to high water conditions. The Commission therefore finds that the project, as conditioned, is consistent with the public access and recreational policies of the Coastal Act.

4.3.5 Conversion of Agricultural Lands

Coastal Act section 30242 states:

> *All lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agriculture is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.*

As discussed above, the lagoon has been artificially breached for at least the past 75-100 years, originally to increase available grazing lands. Since 1991, the CDFG has purchased 112 acres of low-lying lands, mostly pasture, surrounding the lagoon as part of the Lake Earl Wildlife Area. Only 45 acres of grazing land are still in private ownership below the 10 foot contour. Although consistent records were not maintained during most of this period, it is generally accepted that prior to 1987, the lagoon was breached at a lower level than is proposed by the applicants. Nevertheless, artificially breaching the lagoon at 8 feet will prevent the inundation of grazing lands that would be flooded under natural conditions. Therefore, the proposed project, while not designed to maximize available pasture, will prevent the loss of agricultural lands that otherwise would be flooded. Furthermore, the proposed project does not involve the conversion of agricultural lands to another use such as residential development. Rather, the project will maintain these lands in their current state. Thus, the proposed project will not cause the

conversion of agricultural lands to non-agricultural uses and is compatible with continued agricultural use on surrounding lands in conformance with Coastal Act section 30242.

4.4 California Environmental Quality Act

Section 13096 of the Commission's administrative regulations requires Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of the CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse effects that the activity may have on the environment.

As discussed above, the proposed project is conditioned to be consistent with the resource protection policies of the Coastal Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A
SUBSTANTIVE FILE DOCUMENTS

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Authorities Cited

Herb Pierce, Wildlife Biologist, California Department of Fish and Game, Eureka.

Gary Monroe, Wildlife Biologist, California Department of Fish and Game, Eureka.

Anne Henerson-Arzapalo, National Fisheries Research Center, National Fish and Wildlife Service. Fish Culture and Ecology Laboratory, Kerneysville, West Virginia

Jamie Rosko, Native American anthropologist subcontractor to Tetratech inc.

APPENDIX B

STANDARD CONDITIONS

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.

4. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the executive director or the Commission.

5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.

6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

APPENDIX C

COASTAL DEVELOPMENT PERMIT HISTORY

1. Emergency permit 1-87-04G (December 17, 1987) and emergency permit 1-88-01G (February 1, 1988) were granted to the Del Norte County Department of Public Works to breach the lagoon at 8 feet MSL to avoid flooding of Kellogg Road and Lower Lake Road;

2. Permit No. 1-87-216 was granted to the Del Norte County Department of Public Works and the California Department of Fish and Game as co-applicants. The breaching was scheduled to occur between October 15 and April 15 when the lake elevation reached 6 feet MSL, primarily for wildlife management purposes (i.e. to avoid flooding of the seasonal grazing areas for the federally endangered Aleutian Canada Goose). Special conditions of the permit established: bench elevation markers for lake levels, required notice of breaching to other agencies, review by both the State Lands Commission and the U.S. Army Corps of Engineers, and limited the duration of the permit for two years, with a June 1, 1990 expiration date. Among other things, the permit ended the practice of breaching the lagoon in the late spring and summer months for the benefit of gaining additional summer grazing lands in low lying areas. The Commission resolved the conflict between agricultural and natural resource interests in favor of protecting the wildlife and fisheries resources under Coastal Act Section 30007.5. At the same time, the California Department of Fish and Game developed a draft management plan for the Lake Earl and Lake Talawa area and the California Department of Water Resources began a study of the hydrology of Lake Earl and Lake Talawa;

3. Emergency Permit 1-88-06G (August 29, 1988) was granted to the California Department of Fish and Game to abate a mosquito problem, which is believed to have been caused by a combination of factors, such as a higher summer lake level than years past and an unusually warm and wet summer. The Department informally agreed to work more closely with local health department officials in monitoring mosquito populations in the lake and in seeking ways to avoid a similar situation from occurring in the future;

4. Permit Application No. 1-90-196 was submitted by the California Department of Fish and Game for a 5-year permit to continue the breaching operations approved under Permit No. 1-87-216. The Department withdrew its permit application in May of 1991 on the basis of comments from the U.S. Fish and Wildlife Service that breaching to protect the seasonal grazing lands of the federally endangered Aleutian Canada Goose was no longer necessary as the goose had shifted its grazing areas to higher ground and to new areas in the Smith River area. The Service also recommended that additional studies be conducted before a long-term breaching program is approved;

5. Emergency Permit 1-91-1G (January 3, 1991) was granted to the Del Norte County Department of Public Works to breach the lake at 8.6 feet MSL for flood control purposes;

6. Permit Application No. 1-91-63 was submitted by the Del Norte County Public Works Department for a 2-year permit to breach the sandbar as proposed under the permit application herein. The Commission approved the permit on December 11, 1991, with a special condition that the sandbar be breached whenever the lake elevation reached 4 feet above MSL. Since breaching at 4 feet MSL was not acceptable to the California Dept. of Fish and Game, the Department withdrew its permission to allow the County to enter its land to breach under those conditions;

7. Emergency Permit 1-92-04G (February 4, 1992) was granted to the Del Norte County Department of Public Works to breach the lake at 8.9 feet MSL for flood control purposes;

8. Emergency Permit 1-93-01G (January 13, 1993) was granted to the Del Norte County Department of Public Works to breach the lake at 9.8 feet MSL for flood control purposes;

9. Emergency Permit 1-94-03G (February 3, 1994) was granted to the Del Norte County Department of Public Works and the California Dept. of Fish and Game to breach the lake at over 8.5 feet MSL for flood control purposes;

10. Emergency Permit Application No. 1-94-04G was received on February 7, 1994 from Tom Resch of the Pacific Shores Property Owners Association when the lagoon were over 8.5 feet MSL. The application was returned to the applicant on February 11, 1994 due to the inability of the applicant to get written permission to breach from the California Dept. of Fish and Game;

11. Emergency Permit 1-95-01G (January 10, 1995) was granted to the Del Norte County Department of Public Works and the California Dept. of Fish & Game to breach the lake at 10.5 feet MSL for flood control purposes;

12. Emergency Permit 1-95-12G (December 29, 1995) was granted to the Del Norte County Department of Public Works and the California Dept. of Fish & Game to breach the lake at over 8 feet MSL for flood control purposes;

13. Emergency Permit 1-96-15G (December 2, 1996) was granted to Del Notre County Department of Public Works and California Dept. of Fish & Game to Breach the lake at above 8 feet MSL for flood control purposes;

14. Emergency Permit 1-97-082G (December 2, 1997) was granted to Del Notre County Department of Public Works and California Dept. of Fish & Game to Breach the lake at above 8.9 feet MSL for flood control purposes;

16. Emergency Permit 1-98-022G (March 10, 1998) was granted to Del Notre County Department of Public Works and California Dept. of Fish & Game to breach the lake at above 9 feet MSL for flood control purposes: Emergency Permit 1-98-098G (November 24,1998) was granted to Del Norte County Department of Public Works to breach the lake at above 9 feet MSL for flood control purposes; and

17. Emergency Permit 1-99-007G (February 10, 1999) was granted to Del Norte County Department of Public Works to breach the lake at above 9 feet MSL for flood control purposes.